# TITLE 18. ENVIRONMENTAL QUALITY

# **CHAPTER 9. WATER POLLUTION CONTROL**

### ARTICLE 3. AQUIFER PROTECTION PERMITS - GENERAL PERMITS

#### PART A. GENERAL PROVISIONS

# R18-9-A315. Interceptor Design, Manufacturing, and Installation for Onsite Wastewater Treatment Facilities

- A. Interceptor requirement. An applicant shall ensure that an interceptor as required by R18-9-A309(A)(7)(c) or necessary due to excessive amounts of grease, garbage, sand, or other wastes in the sewage is installed between the sewage source and the on-site wastewater treatment facility.
- **B.** Interceptor design. An applicant shall ensure that:
  - An interceptor has not less than two compartments with fittings designed for grease retention and capable of removing excessive amounts of grease, garbage, sand, or other wastes. Applicable structural and materials requirements prescribed in R18-9-A314 apply;
  - 2. Interceptors are located as close to the source as possible and are accessible for servicing. The applicant shall ensure that access openings for servicing are at grade level and gas-tight;
  - 3. The interceptor size for grease and garbage from non-residential kitchens is calculated using by the following equation: Interceptor Size (in gallons) =  $M \times F \times T \times S$ .
    - a. "M" is the number of meals per peak hour;
    - b. "F" is the waste flow rate from Table 1, Unit Design Flows.
    - c. "T" is the estimated retention time:
      - i. Commercial kitchen waste, dishwasher or disposal: 2.5 hours; or
        ii. Single service kitchen with utensil wash disposal: 1.5 hours;
    - d. "S" is the estimated storage factor:
      - Fully equipped commercial kitchen, 8-hour operation: 1.0;
        Fully equipped commercial kitchen, 16-hour operation: 2.0;
        Fully equipped commercial kitchen, 24-hour operation: 3.0; or
        Single service kitchen, 1.5;
  - 4. The interceptor size for silt and grease from laundries and laundromats is calculated using the following equation: Interceptor Size (in gallons) = M × C × F × T × S.
    - a. "M" is the number of machines;
    - b. "C" is the machine cycles per hour (assume 2);
    - c. "F" is the waste flow rate from Table 1, Unit Design Flows;
    - d. "T" is the estimated retention time (assume 2); and
    - e. "S" is the estimated storage factor (assume 1.5 that allows for rock filter).
- C. The applicant may calculate the size of an interceptor using different factor values than those given in subsections (B)(3) and (4) based on the values justified by the applicant in the Notice of Intent to Discharge submitted to the Department for the on-site wastewater treatment facility.
- **D.** The Department may require installation of a sampling box if the volume or characteristics of the waste will impair the performance of the on-site wastewater treatment facility.